



Case Report

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CLINICAL EFFICACY OF YOGA BASTI IN ARTAVAKSHAYA WITH SPECIAL REFERENCE TO PCOS: A CASE REPORT

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ABSTRACT

According to Acharya Sushruta, Artavakshaya refers to irregular menstruation, characterized by its absence or insufficient quantity, accompanied by pain in the vagina (yoni marga). This condition can be correlated to Polycystic Ovary Syndrome (PCOS), where oligomenorrhea, delayed or scanty menstrual cycles, is a prevalent symptom (80-90%). PCOS is an endocrine disorder characterized by hyperandrogenism, anovulation, and the presence of polycystic ovaries, as confirmed by ultrasound (USG). Aim: To explain Yoga Basti's efficacy in managing Artavakshaya. Background: A married Hindu female patient of age 35 years visited Prasuti Tantra and Stree Roga OPD of NIA, Jaipur, Rajasthan, India, on 27th June 2022 with a complaint of delayed and scanty menses along with pain during menstruation since 13 months. Physically, the patient appeared lean and thin. Ultrasonography (TAS) dated 15-06-2022 suggested B/L PCOD. Based on clinical presentation and USG findings, the patient was diagnosed with Artavakshaya, which was further correlated with PCOS. Methodology: Mainly, Vata dosha (Apana Vata) vitiation symptoms were observed in the patient, and therefore, Yoga Basti chikitsa (3 consecutive cycles) was done to eliminate Vata dosha. Her complete nidana parivarjana was done, and she was advised to follow rajawalacharya. Result: After three cycles of Yoga Basti, her menses were regular with normal menstrual flow and decreased pain intensity. Ultrasonography dated (12-9-22) suggested a normal study of the uterus and adnexa, and no evidence of PCOD was found. Conclusion: Yoga Basti is effective in the management of Artavakshaya with special reference to PCOD. This study aims to report the potential of Yoga basti in Artavakshaya.

Keywords: Artavakshaya, PCOD, Yoga basti, Rajaswalacharya, Oligomenorrhea, Case Report

INTRODUCTION

A regular menstrual cycle is crucial for maintaining a woman's well-being during her reproductive years. It represents the hormonal and gynaecological balance within her reproductive system. A normal menstrual cycle typically spans one month between periods, with menstrual bleeding lasting three to five days and devoid of pain or discomfort. Artava should neither be excessively heavy nor too scanty.¹ The hypothalamus-pituitary ovarian axis and another associated hormone control it.² Ayurveda explain the significance of "Suddha Artava" and mentions that menstrual irregularities, termed "Artava Dushti," can contribute to infertility³. In contemporary times, menstrual irregularities have become a leading cause of gynaecological consultations worldwide due to poor dietary choices and sedentary lifestyles. Oligomenorrhea, characterized by irregular and inconsistent menstrual flow, given the similarity in symptoms, can be associated with "Artavakshaya" in Ayurveda. Modern medical approaches primarily focus on hormonal therapies for managing menstrual irregularities, but they provide only short-term symptomatic relief. In Ayurveda, Acharya Sushruta described "Artavakshaya" with features such as delayed menstruation and scanty flow accompanied by menstrual pain⁴. It can be correlated with certain menstrual disorders that are as follows:

- Yathochita kala adarshanam as delayed menses or oligomenorrhoea
- Alpata as hypomenorrhoea
- Yonivedana as dysmenorrhoea

So, on comparative analysis, it becomes apparent that Artavakshaya, as described in Ayurveda, shares similarities with modern medical conditions such as oligomenorrhea and hypomenorrhoea. These conditions align closely with the concept of Artavakshaya. It can be correlated with Polycystic Ovary Syndrome (PCOS), where oligomenorrhea emerges as the predominant symptom, affecting 80-90% of individuals with PCOS. PCOS manifests as an endocrine disorder characterized by hyperandrogenism, anovulation, and the presence of polycystic ovaries confirmed through ultrasound examination. The prevalence of PCOS is high among Indian women, with rates close to 10% according to Rotterdam's criteria and 5.8% based on NIH criteria.⁵

Patient information

A married Hindu female patient of age 35 years visited Prasuti Tantra and Stree Roga OPD of NIA, Jaipur, on 27th June 2022 with chief complaint of delayed and scanty menses along with pain during menstruation for 13 months and associated complaint of burning micturition since 12 months. The study was carried out as per the International Conference on Harmonization- Good Clinical Practices (ICH-GCP).

Menstrual History

The patient had attained her menarche at 14 years of age. She has had normal menstruation since menarche, but presently, for 13 months, she was having delayed, scanty and painful menstruation.

LMP: 12/06/2022

Previous LMP: 29/05/2022

Duration: 2 days (1 pad per day- Partially soaked).

Interval: 45 days

Pain: Severe

Colour: Dark Red

Clots: Absent

Burning sensation: Absent

Stickiness: Absent

Foul smell: Absent

Obstetric History: G2P2A1L1D1

G1 - FTND x Fch x Dead after four months of birth x 11 years back

G2 - FTND x Fch x 10 years back

Past Medical History: No H/O thyroid dysfunction, Diabetes Mellitus, Hypertension or any other significant medical history was found.

Past Surgical History: Cholecystectomy was done x 8 years back.

Family history: The patient had no relevant family history.

Allergy History: The patient had no specific history of allergy to any drug or food material.

Personal History

Appetite – Normal

Sleep – Sound

Bowel – Clear

Bladder – Burning micturition

Addiction – No

Diet – Vegetarian

General Examination

Built – Lean and Thin

Nourishment – Moderate

Weight – 45 kg

Height – 5 feet 2 inches = 1.57 meters

BMI - 18.1kg/met²

Temperature – 97.8 F

Pulse – 78/min

Blood Pressure – 110/70 mmHg

Respiratory rate: 18/min

Tongue: Niram (uncoated)

Systemic Examination

CNS – Patient was conscious, well oriented to place and time, and all 12 pairs of cranial nerves are responsive.

CVS – S1S2 audible, Normal, No abnormal sounds heard.

RS – Air entry is equal on both sides.

GIT – Per Abdomen – Soft, Non-tender.

Ashthavidha Pareeksha

Nadi – Vata-Pittaj

Mala – Niram, once in a day

Mutra – 4-5 times/ day

Jivha – Alipta (uncoated)

Shabda – Spashta

Sparsha – Anushna

Druk – Prakrut

Akriti – Madhyam

Dashavidha Pareeksha Bhava

Prakruti – Vata-Pittaja

Vikruti – Vishmasamveta

Sara – Madhyama

Samhana – Avara

Pramana – Madhyama

Satmya – Avara

Satva – Madhyama

Ahara Shakti – Madhyama

Vyayama Shakti – Madhyama

Vaya – Madhyama

Laboratory Investigations

Ultrasonography Impression – 15/06/2022

The uterus is normal in size and shape

Both ovaries are enlarged in size, with non-dominant follicles arranged at the periphery.

Right ovary measures 32-22-31 mm, volume 11 cc

Left ovary measures 34-22-32 mm, volume 13 cc

Bilateral PCOD

Blood investigation – 28/06/2022

Haemoglobin – 12.6 gm%

RFT, LFT – WNL

RBS – 83 mg/dl

Thyroid Profile – T3- 1.23ng/ml, T4- 10.47ug/dl, TSH-

2.150µIU/ml

Urine R/M

Colour – Pale Yellow

Albumin and Sugar – Absent

RBCs – 2-3/HPF

Puss Cell – 1-2/HPF

Treatment

Basti Chikitsa – Yoga Basti for three consecutive cycles

Anuvasan Basti with Dashmool Tail

Asthapan Basti with Dashmool Kwath and Erandmool Kwath

Basti administration can be divided into three stages:

Purva Karma – The patient was advised to do local abhyanga and swedana (massage and steam) and elimination of stools and urine before the administration of basti.

Pradhana Karma – The patient was advised to lie down in the left lateral position with the right lower extremity flexed at the knee and hip joints and the left lower extremity kept straight and to keep her left hand below the head on the basti (enema) table.

Anuvasana basti – It was given after a meal at about 10 a.m. – 12 noon. A small amount of Dashmoola taila was applied to the anus. Then, lukewarm Dashmoola taila (60 ml) was taken in an enema syringe. A rubber catheter was attached to the enema syringe lubricated with taila. A rubber catheter was gently inserted into the patient's anus to a depth of about 4 inches after removing air from the syringe. The patient was asked to take deep breaths and remain still while the catheter and the medicine were being introduced.

Asthapana basti – 600 ml of basti was given an empty stomach at about 8 a.m. – 10 a.m. Basti is prepared by mixing of madhu (30 ml), saindhava lavana (5 gm), sneha (Dashmoola taila 30 ml), Shatpushpa kalka (10 gm) and Kwath (Dashmool Kwath (250 ml) + Erandmool Kwath (250 ml) in a sequence. Basti was given by Douche Pot. The pot has two parts: a plastic can, an attached plastic tube with a nozzle, and a lock. The douche pot was held to the stand approximately three to four feet above the patient.

Gravitational force plays the role of passive pressure.

Pashchat Karma – After giving the basti, the patient was asked to lie on her stomach with her arms and legs on the table. Then, gentle taps were given on her hips and feet to help the medicine spread all over her body. She stayed like this for a while to let the medicine work. Later, she was told to get up and rest in bed but

not to sleep during the day. Basti pratyagamana kala (when basti medicine was returned) was noted daily.

Pathyapathya – The patient was advised to take laghu supachya aahara. (light and easily digestible diet). Mild to moderate exercise as per her capacity. Divaswapna (day sleep) is contraindicated.

Table 1: Basti Protocol

Day	Basti	Time	Quantity	Duration
Day 1	Anuvasana	After food	60 ml	Three consecutive cycles
Day 2	Anuvasana	After food	60 ml	
Day 3	Asthapana	Before food	600 ml	
Day 4	Anuvasana	After food	60 ml	
Day 5	Asthapana	Before food	600 ml	
Day 6	Anuvasana	After food	60 ml	
Day 7	Asthapana	Before food	600 ml	
Day 8	Anuvasana	After food	60 ml	

Table 2. Oral Medicine

Drug name	Dose	Duration
Gokshur churna	3 gm BD, before food with water	3 Months
Kanchnar Guggulu	500 mg BD, after food, with lukewarm water	

Pathya Apathya advised (Do’s and Dont’s)

Advised to follow rajaswala charya⁶ in every cycle.

1. The patient was advised to take chapatis made of yava, i.e., barley with ghee.
2. Sweet daliya of yava mixed with go ghrita and go dugdha.

3. Raktashali rice is made with go dugdha mixed with go ghrita during the bleeding phase of the cycle.
4. She was advised not to take spicy, oily, fast food, packed food items.

OBSERVATION AND RESULTS

Table 3: Effect on Menstrual cycle

	Before Treatment	After Treatment
Interval	45 Days	28-32 Days
Flow days	2 Day	3 Days
Pad History	D1 – 1 Pad D2- 1 pad Both partially soaked	D1 –3 pads (fully soaked) D2 –2 pads (fully soaked) D3-1pad Half soaked
Pain	Severe	Mild
VAS Score	6	2
Colour	Dark Red	Red
Clots	Absent	Absent
Burning Sensation	Absent	Absent
Foul Smell	Absent	Absent

Table 4: Changes in USG

USG	Before Treatment	After Treatment
Date	15/06/2022	12/09/2022
Uterus	The uterus is normal in size and shape	normal in size and shape
Right Ovary	measures: 32-22-31mm, volume 11cc	measures: 20x20x25 mm; volume 5 cc
Left Ovary	measures: 34-22-32mm, volume 13cc	measures: 20x20x25 mm; volume 5 cc
Impression	Bilateral PCOD	No significant abnormality is noted

DISCUSSION

Artavakshaya is a menstrual disorder characterized by a low amount of menstrual flow accompanied by pain that varies in duration, with imbalances in Vata and Pitta dosha being prominent. Menstrual blood, known as artava, is formed from rasa dhatu about a month after its proper metabolization⁷. When there's a kshaya in rasa dhatu, it leads to Artavakshaya, and raktakshaya (blood depletion) happens simultaneously. Artava and rakta are connected because they are the same utpattisrota, rasa dhatu and share similar qualities: agneya in nature.

Maharshi Sushruta stated that artava has agneya qualities. In cases of Artavakshaya, there's a decrease in the body's agneya

quality, leading to Pitta kshaya and Vata vrudhhi. Artavakshaya is a common menstrual disorder caused by the vitiation of mainly Vata and Pitta dosha. Also, Vata is said to be the main etiological factor for all gynaecological disorders.⁸

The patient was consuming the causative factors of Vata vitiation like vishamashana (improper dietary habits), intake of laghu and ruksha guna (light and unctuous) diet, shita (cold) diet, katu rasa dominant diet (spicy food), with manasika nidanas (psychological factors), chinta (worry), shoka (grief), and bhaya (fear). These are significant factors for the aggravation of Vata.

In Artavakshaya, the main involvement of Vata is of Apana Vayu. Apana Vayu has a vital role in the expulsion of samirana (flatus),

sakrit (faeces), mutra (urine), sukra (semen), garbha (fetus), artava (menstrual fluid)⁹. Mulsthana of Aartavasrotas is garbhashya (uterus) and aartava vahini dhamni, the ultimate sthana of the Apana Vayu. Vata plays a major role in the physiology and pathology of the reproductive tract.

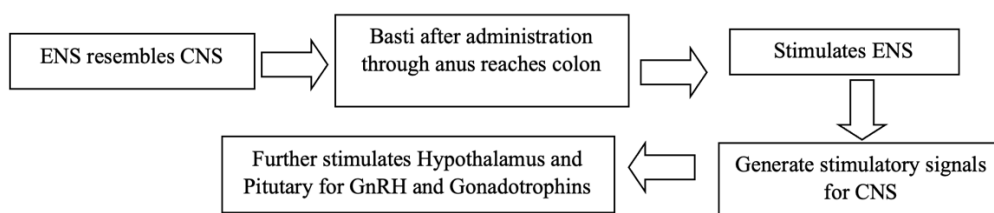
Artava pravrutti is the karma of Apana Vayu so due to obstruction of Apana Vayu, the natural flow of mensuration will not occur at its proper time. Alpartavam refers to a decrease in the appropriate quantity of formed artava, resulting in scanty menstruation. Yoni vedana occurs due to improper expulsion of artava, which is caused by malfunctioning of Apana Vayu. Due to the kshaya of Pitta, the artava pramana is decreased.

In Ayurveda, Basti is the prime effective chikitsa for such conditions.¹⁰ Anuvasan and Asthapana basti helped in vata pacification and anulomana, which is ardhchikitsa for Vata dosha, and it is the main causative factor for Artavakshaya. Basti can be given to pacify this aggravated Vata, and the major goal of the Basti chikitsa is to maintain proper menstrual flow. According to Acharya Kashyap, Anuvasan Basti is the best in alp-pushpa¹¹ and according to Acharya Vagbhata, Aasthapan Basti is the best for raja-kshaya¹². That's why Yoga Basti was planned for this patient. It is recommended to manage Artavakshaya with shodhana therapy using drugs that enhance digestion and stimulate Agni while balancing Vata and Pitta doshas. These drugs help increase the diminished menstrual flow, which is igneous due to its similarity to agni, Pitta, and artava. They also facilitate the proper movement of Vata dosha. Oil is considered one of the best remedies for pacifying Vata dosha. It calms Vata (Vataghna), does not aggravate Kapha (naatishleshmavardhana), and promotes yonivishodhana¹³ (cleansing of the uterus). Therefore, administering Anuvasana Basti with medicated oil containing Vatakapasamaka and agnivardhaka herbs that balance Vata and Kapha doshas while enhancing agni can help alleviate agnimandya. This, in turn, supports the formation of proper rasa dhatu, leading to the optimal production of artava (menstrual blood), and its Vata-pacifying properties can help regulate Apana Vata for the appropriate excretion of menstrual blood, can be effectively used in Artavakshaya.

Probable mode of action of Drugs

Dashmoola taila, as per the concept of viriyasamkranti (transformation of potency) described by Acharya Charaka¹⁴, the potency of Dashmoola is already transferred into Dashmoola Kwatha (decoction). When Dashmoola in its kalka form is processed with taila, it further enhances the potency, resulting in the transmission of potency into the taila. Consequently, the oil carries the complete potency of the herb. The properties of Dashmoola taila, including its madhura, tikta, kashaya rasa, guru, snigdha guna, ushna veerya, madhura katu, vipaka, and tridoshanashaka karma act on Artavakshaya through its dravya, guna, and prabhava. Studies have demonstrated that Dashmoola possesses anti-inflammatory, analgesic, and antipyretic actions¹⁵.

The probable mode of action of Basti



Dashmoola Kwath¹⁶ is potent Vata-Kapha shamak and garbhashaya sodhaka. Some of the contents of this have some amount of tannin and catechin, which directly affects the musculature of the uterus, thereby stimulating the uterus. Dashmoola Kwath effects on Artavajanana.

Erاندmool Kwath, according to Acharya Charaka, Erاندmool is best in Vatahar dravya.¹⁷ Madhura, katu, kashaya rasa, kashaya rasa, snigdha, tikshna, sukshama guna, madhura vipaka, ushna veerya, Vatahara and stanyajanana karma of Erاندmool acts on Artavakshaya.

Kanchnara Guggulu¹⁸ having contents Kanchnara and Guggulu possess laghu, ruksha, sukshama guna, ushna veerya, katu vipaka and lekhana properties by virtue of which it causes cyst lysis and reduces ovarian volume. Kanchnara has tannins and mucilage, sennoside, etc., effectively suppressing tumour (cyst) activity and increasing the enzymatic antioxidant levels.

Gokshur churna, as the patient was lean and thin along with the symptoms of burning micturition, so Gokshur churna was selected as rasayana because it has guru, snigdha guna, madhur ras, madhura vipaka and sheeta veerya, Vata-Pitta shamak and mutrala properties.¹⁹ Gokshur also has vrishya and rasayana properties²⁰.

Mode of action of Basti

According to Ayurveda, administering Basti into the pakvashaya (large intestine) can draw doshas or malas (metabolic waste products) from all over the body, from the feet to the head, due to its potency (virya). This process is likened to how the sun, positioned in the sky, draws moisture from the earth through its heat.²¹ Just as trees, when watered at their roots, grow branches with beautiful leaves, flowers, and fruits, eventually reaching great heights, similarly, administering basti in the rectum produces significant results throughout the body, from head to toe.²² In modern terms, administering basti through the rectum allows quick absorption into the bloodstream, leading to rapid effects. The Enteric Nervous System (ENS) controls various functions of the gastrointestinal tract (GIT), similar to how the Central Nervous System (CNS) functions. Endogenous opioids, like beta-endorphin, are found in both the GIT and the brain, where they play a role in regulating the normal menstrual cycle. The active components of basti stimulate the release of these endogenous opioids in the GIT. These opioids influence the release of Gonadotropin-Releasing Hormone (GnRH) from the hypothalamus and Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH) from the pituitary gland. This helps regulate the Hypothalamo-Pituitary-Ovarian axis, thereby regulating the menstrual cycle. Essentially, basti stimulates the ENS, which sends signals to the CNS, leading to the hypothalamus and pituitary gland stimulation through neurotransmitters.²³

CONCLUSION

This case report shows that Ayurvedic medicines are effective on various parameters of Artavakshaya, like it has improved the interval, duration, pain, clots and flow of menstruation, and it was effective in reducing ovarian volume. Thus, Basti chikitsa can be a practical solution to Artavakshaya's management.

Informed consent

Consent was obtained from the patient to publish their clinical details.

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